

UNDERSTANDING TECHNICAL COLLEGE FUNDING IN WISCONSIN

Wisconsin's technical colleges appear to receive unusually high funding levels per student compared to other public two-year colleges nationally. Yet our review has found more than 100,000 technical college students being served in Wisconsin are absent in national data, likely inflating the funding figures. Accounting for the missing students would leave spending levels in Wisconsin somewhat higher than nationally but much closer to what is typical for other two-year colleges.

Previous Forum research has found that per student tax and tuition funding for public colleges and universities in Wisconsin has largely lagged the national average in recent years. A look at new national data shows that was once again true in 2022.

Yet, despite the state's lackluster ranking for public higher education funding overall, one surprising finding in recent years has been the state's consistently high ranking for funding going to two-year public colleges. When compared to other two-year colleges nationally, the funding per full-time student for the Wisconsin Technical College System (WTCS) ranks in the top 10 among states nationally.

To better understand this high ranking, we looked at a range of factors, including those that WTCS officials have said help to explain it: the relatively costly technical education that the state's 16 technical college districts provided to a large number of part-time students as well as a range of free services – some mandated by state law – that are provided to adults.

First, we examine funding data from the State Higher Education Executive Officers Association (SHEEO) on public institutions, particularly two-year colleges. Then, to help explain those figures, we draw on information from WTCS officials as well as more extensive data from the Integrated Postsecondary Education Data System (IPEDS) provided by the Student Success Through Applied Research (SSTAR) lab at the University of Wisconsin-Madison.

Our review finds that WTCS campuses serve more than 100,000 students who are not reported to IPEDS, a

huge discrepancy that likely makes technical college spending per pupil in Wisconsin look much higher than it actually is. In addition, the IPEDS data show that the specific services provided by WTCS campuses tend to be more expensive than those of typical two-year colleges nationally, which also likely explains at least a part of the higher spending in Wisconsin.

This finding matters because it suggests that technical colleges and public higher education institutions overall in the state are doing more with their existing funding than has been previously understood. It also matters because of pressure to address ongoing labor challenges often cited by state leaders as well as to limit education spending to reasonable levels.

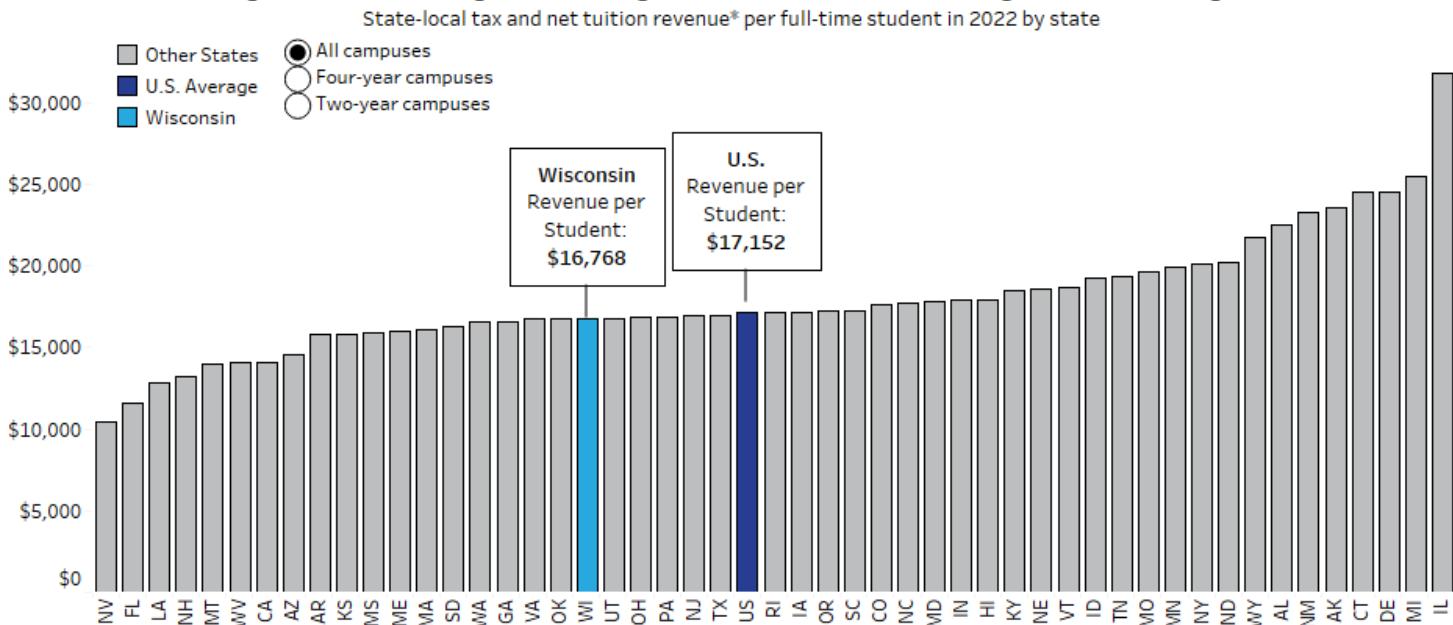
THE BIG PICTURE

In fiscal year 2022 (running from July 2021 to June 2022), all public higher education institutions in Wisconsin received operating funds of \$16,768 per full-time equivalent (FTE) student in state and local tax and net tuition revenues, according to the latest SHEEO data. That amount, which does not include federal pandemic aid, was 2.2% less than the U.S. average of \$17,152 per pupil (see Figure 1 on page 2).

Nationally, Wisconsin ranked 32nd among the 50 states in 2022 for overall higher education funding per student, down from 26th highest in 2021. The SHEEO data presented here are adjusted for regional cost of living differences and look at tax and tuition funding used for operations. They exclude revenues used for capital projects and debt payments, research, medical



Figure 1: Core Funding for Public Higher Education in Wisconsin Lags National Average



Source: State Higher Education Executive Officers Association; *does not include stimulus funding

education, hospitals, and financial aid and tuition discounts.

As we have noted in our previous research, funding for four-year public campuses in Wisconsin falls in the bottom 10 states nationally while funding for two-year campuses ranks in the top 10. In 2022, the four-year Universities of Wisconsin campuses received \$16,036 in tax and tuition funding per student, ranking 43rd nationally and well below the national average of \$19,386. The two-year campuses in Wisconsin – the WTCS members – brought in \$17,419 per FTE student, which was fifth-highest nationally and substantially above the U.S. average of \$12,642.

EXPLAINING THE NUMBERS

In helping to explain why their revenues per FTE student are higher than most other two-year campuses nationally, WTCS officials have pointed first to their heavy focus on technical education and the fact that two-year campuses like theirs have many more part-time students.

As Figure 2 on page 3 shows, [WTCS reports](#) its campuses had a headcount enrollment of 287,951 students in 2023 but the equivalent of only 60,011 students enrolled on a full-time basis of 30 credits per year. This large number of part-time students can raise WTCS costs for administration as well as student

services such as tutoring and advising since all students need those services regardless of how many credits they take.

The SHEEO data rely on FTE enrollment counts and as a result likely inflate the funding per student for two-year colleges, since these data can count multiple part-time students as one FTE and in the process spread the colleges' revenues across a smaller number of students than they serve in reality. In addition, technical education in areas such as manufacturing can cost more since it may require both investments in expensive equipment and smaller class sizes to ensure the proper instruction.

However, many other two-year campuses nationally face these same challenges and costs related to high numbers of part-time students. An examination of whether these additional expenses are greater in Wisconsin than in other states should help to show whether our state is truly unusual.

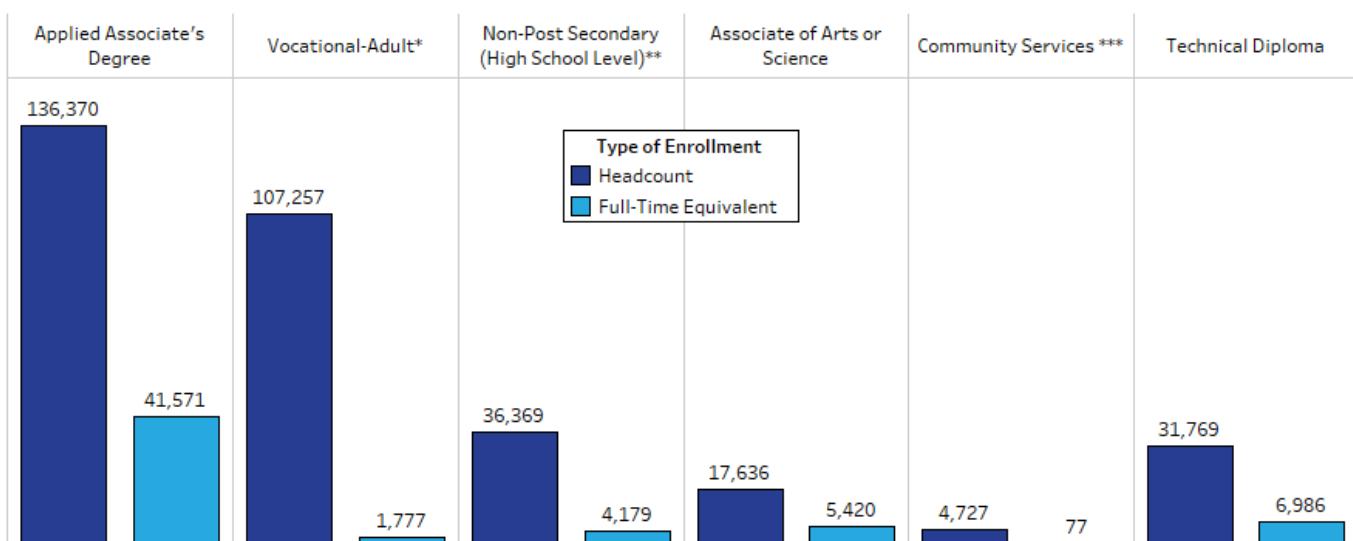
CLASSIFYING WISCONSIN'S TECHNICAL COLLEGES

To conduct this analysis, we turned to IPEDS data on two-year colleges from the National Center for Education Statistics supplied by Professor Nicholas Hillman and Amberly Dziesinski of UW-Madison. These more detailed data break two-year campuses in



Figure 2: Wisconsin Technical Colleges Serve Many Part-Time Students

2023 WTCS enrollment by program and type of enrollment count



Source: Wisconsin Technical College System; *Continuing education such as professional development and public safety; **Includes adult education, English language, and career exploration courses; ***Self-enrichment courses such as arts and crafts.

Wisconsin and the rest of nation into various categories using what is known as the [Carnegie system of classifying](#) higher education institutions. This system identifies nine types of two-year campuses that grant credentials up to associate degrees.

Fifteen of the 16 WTCS members are classified as “technical colleges,” a designation for colleges offering a high degree of career and technical education. Technical colleges have been gradually replaced in many parts of the country by community colleges more focused on associate degrees and general education for students planning to transfer to a four-year institution. Only 15% of students at two-year colleges nationally go to technical colleges like those in Wisconsin.

Only six other states have more technical colleges than Wisconsin. Three are also Rust Belt states and all six are all much more populous: Pennsylvania, Ohio, Illinois, Georgia, California, and Texas. The WTCS emphasis on technical, vocational, and industrial education may reflect the industrial base in Wisconsin, which has the [second-highest share](#) of manufacturing workers in its labor force of any state after Indiana.

Only one of the 16 WTCS campuses is not classified as a technical college – Madison College (also known as Madison Area Technical College), which has a high degree of students seeking to earn associate degrees or transfer to a four-year institution. Nine of the 16 WTCS

colleges are also classified as serving a high degree of non-traditional students, a group that is typically older and more likely to work full-time than traditional students who enroll in college soon after high school.

This focus on non-traditional students sets the WTCS members apart, even among the already relatively small group of technical colleges nationally, and suggests WTCS members may work with a student population that is particularly likely to be part-time and more expensive to serve.

A LOOK AT TECHNICAL COLLEGES NATIONALLY

The IPEDS data suggest this is in fact the case. For example, 19.7% of the students at WTCS colleges in 2021 (the most recent data available) were full-time, compared to 29.8% at all technical colleges nationally.

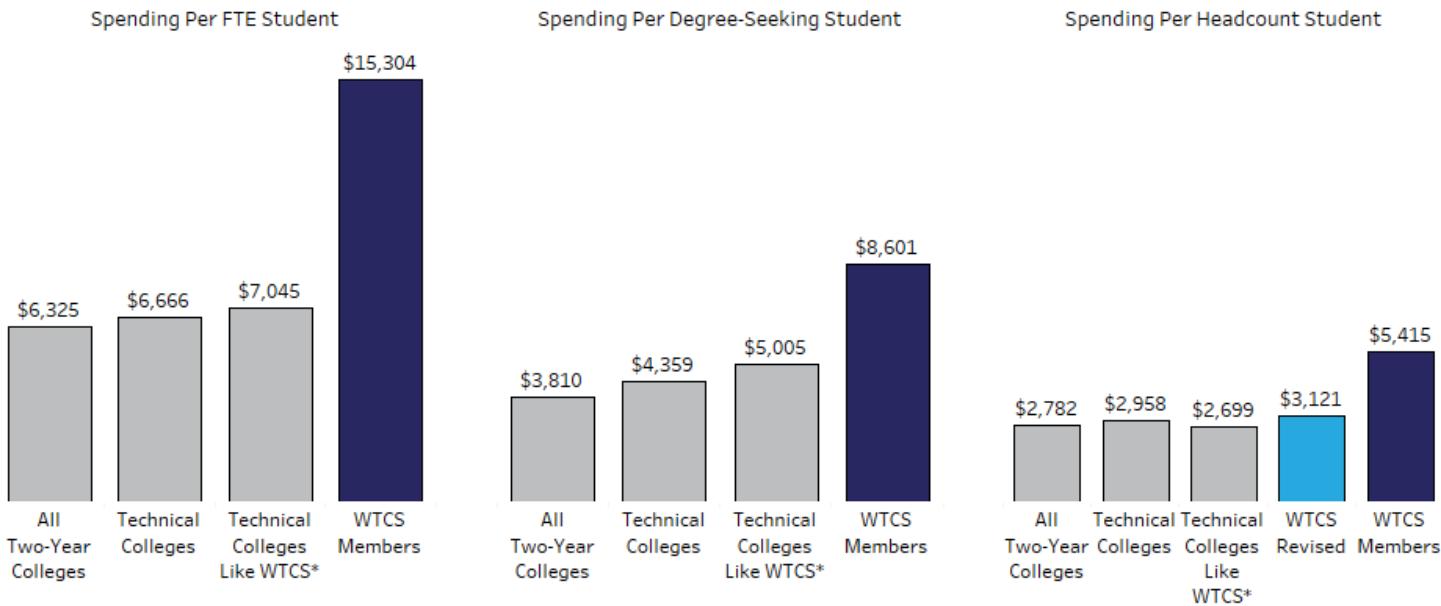
Meanwhile, 37% of WTCS students were not seeking a degree, compared to 32.1% of technical college students nationally. These differences likely make the WTCS students more expensive to serve since they are less likely to attend classes full-time over a longer period.

The IPEDS data confirm that point, as well. Nationally, average instructional spending in 2021 was \$7,045 per FTE student for technical colleges with both a high degree of career and technical education and a high



Figure 3: Two-Year College Spending Per Student Varies Widely Based on the Type of Student Count

Average per pupil instructional spending in 2021 by type of two-year college and type of enrollment count



Sources: Integrated Post-Secondary Education Data System; Student Success Through Applied Research lab at UW-Madison; *Carnegie Classification Type 9

degree of non-traditional students (see Figure 3). The spending for this type of two-year college – the most common type in Wisconsin – was higher than it was for both all technical colleges and all public two-year colleges more broadly.

If instead we look at the average cost per student using headcount enrollment figures, the average instructional spending falls to \$2,699 per student for the type of technical college with many non-traditional enrollees that accounts for most WTCS members. That is actually modestly lower than the average for all types of technical colleges and all two-year colleges.

THE KEY DIFFERENCE IN THE DATA

The IPEDS data, however, only partially solve the mystery. WTCS spending per student remains much higher than even other similar technical colleges nationally with many non-traditional students, as Figure 3 shows. What remaining factors could explain the difference?

The biggest single explanation likely involves how many WTCS students are counted in the national data. IPEDS lists total headcount enrollment for 2021 of 143,246 for all WTCS campuses in Wisconsin. That's 105,288 fewer students, or 42.4% less, than the 248,534 students that WTCS itself reports for 2021 in the dataset used for Figure 2.

That's a massive difference and reflects at least in part the mandates in state law that WTCS campuses provide services free of tuition that not all community colleges nationally provide. WTCS members appear to be including their instructional spending for these services in national data but cannot report all of the enrollments.

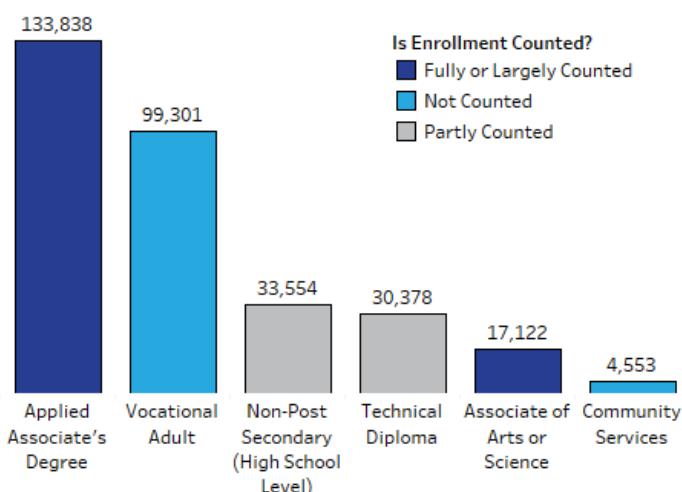
Those services include adult high school, adult basic education, English as a second language classes, and firefighting schools. These little-known state requirements likely provide many benefits to communities by educating local residents, but they also appear to come with a significant cost for the technical colleges.

Figure 4 on page 5 shows the different major types of technical college students in Wisconsin and whether those students are counted in the national IPEDS data. If all these students in Wisconsin were counted, then the average WTCS spending per headcount student would equal \$3,121, a figure that is still higher than the national average but much closer to what is typical for other technical colleges and two-year campuses nationally. (The data are not available to calculate a revised figure for WTCS spending per degree-seeking or FTE student.)

Although it's not possible to know how many other community college students nationally are missing from the IPEDS data, some academic researchers have



Figure 4: More than Two-Fifths of Wisconsin's Technical College Enrollments Not Counted in National Data
Headcount WTCS enrollment in 2022 by type and reporting status*



Source: Wisconsin Technical College System; *Based on whether enrollments are counted in Integrated Post-Secondary Education Data System

found that the number of excluded students can [vary widely by state](#). For its part, NCES has acknowledged that these non-credit enrollments represent a limitation in the IPEDS data, stating that they can lead to “incorrect estimates for revenue per FTE and expenses per FTE since revenues and expenses for noncredit activities are included in the numerator, but noncredit enrollments are not included in the denominator.” The good news is that NCES is working on [changes to its data collection practices](#) to start to address this issue.

A variety of other factors may also help to determine college spending levels. One of the most logical to consider is staff compensation, and we compared salary data for the instructional staff of each WTCS institution as reported to IPEDS to a group of similar colleges selected by either the WTCS branch or by IPEDS staff. In these “Data Feedback Reports,” all but two WTCS campuses – Nicolet and Northeast – paid their instructional staff higher salaries than the median salary for their comparison group.

In its 2022 report, Milwaukee Area Technical College (MATC), for example, reported an average instructor salary of \$98,507 for the equivalent of nine months worked, substantially more than the \$70,925 median among the average salaries reported for the 20 institutions selected by MATC as a comparison group. To some extent, the higher salaries at WTCS institutions may reflect the fact that instructors with vocational and technical expertise are paid more to prevent them from

being recruited by private industry or to lure them away from the private sector in the first place. The comparison may also be affected by factors such as MATC and other WTCS campuses having a larger share of full-time faculty than their peer institutions. Whatever the reason, these higher wages may also contribute to the comparatively greater overall costs of WTCS operations.

CONCLUSION

Wisconsin’s technical colleges are crucial to the state’s workforce and employers as well as to students from across the state, particularly those who are low-income. Technical colleges also represent a substantial cost for both state and local taxpayers, making a clear understanding of their funding levels important for policymakers.

While national data show much higher funding and spending levels for technical colleges in Wisconsin than most other two-year colleges nationally, these data appear to omit some of the key duties of the WTCS campuses in the state and a huge number of their students. Those omissions also affect the overall numbers tracking higher education funding in the state. When determining the right level of technical college and higher education funding and spending in Wisconsin, policymakers and citizens may wish to consider these nuances as well as the unusual if not unique role that these institutions play in the state.

